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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,125	11/21/2001	Rikio Yoshikawa	34175	2793

116 7590 11/04/2002

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CLEVELAND, OH 44114-1484

EXAMINER

NGUYEN, HANH N

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 11/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/990,125

Applicant(s)

YOSHIKAWA ET AL.

Examiner

Nguyen N Hanh

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 30 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 11-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3 and 5 is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 11-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Remarks

The cancellation of claims 8-10 and the addition of claims 11-17 has been acknowledged.

Response to Arguments

1. Applicant's arguments with respect to claims 1-4, 11-17 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4, 11-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 4, there is no antecedent basis for "said inner peripheral portion" in line 14.

Regarding claim 11, there is no antecedent basis for "said coil insulation layers" in lines 11 and 14.

Regarding claim 12, it is not clear if "said rising portion" in lines 14 and 15 refers to "a rising portion" in line 12 or "an annular rising portion" in line 13.

Regarding claim 13, there is no antecedent basis for "said coil insulation layers" in line 11 and it is not clear if "said rising portion" in line 14 refers to "a rising portion" in line 13 or "an annular rising portion" in lines 13 and 14.

Regarding claim 14, there is no antecedent basis for "said coil insulation layers" in lines 11 and 14, it is not clear if "said rising portion" in line 15 refers to "a rising portion" in line 13 or "an annular rising portion" in line 14.

Regarding claim 15, there is no antecedent basis for "said ribs" in line 19 and "on an outer periphery" in line 3 was repeated in line 4.

Regarding claim 16, there is no antecedent basis for "said coil insulation layers" in line 11 and "said ribs" in line 19.

Regarding claim 17, there is no antecedent basis for "said coil insulation layers" in lines 11 and 14, "said ribs" in line 20.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1,2,4,11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of Suzuki et al.

Regarding claim 1, Park discloses an outer rotor type brushless motor comprising an outer rotor having permanent magnets fixed onto an inner periphery of a cup-like rotor yoke, a stator including a stator core having a plural of magnetic pole portions protruded on an outer periphery of an annular portion of said stator core and faced to said permanent magnets and coils wound on said magnetic pole portions, respectively, a cylindrical boss (3 in Fig. 4) disposed on an inner periphery of said

annular portion of said stator core, a rotational shaft (5) extending along an axis of said boss and rotationally supported on said boss by a bearing (4) with a leading end of said shaft having a center portion of said rotor yoke fixed thereto and a mounting plate fixed onto an outer periphery of said boss, a rising portion (Fig. 4) being provided on the side of an inner peripheral portion of said mounting plate so as to form at the top of said rising portion a face parallel to the face of said inner peripheral portion, said boss being extending through a hole in said mounting plate and fixed thereto and said annular portion of said stator core being fixed by screw to the top of said rising portion.

Park fails to show a boss being formed of resin mold.

However, Suzuki et al. disclose an outer type brushless motor wherein the boss is formed of resin mold (Col. 2, lines 62-68 and Fig. 1) for the purpose of simplifying assembly process (Col. 1, lines 60-65).

Since Park and Suzuki et al. are in the same field of endeavor, the purpose disclosed by Suzuki et al. would have been recognized in the pertinent art of Park.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Park by as taught by Suzuki et al. for the purpose of purpose of simplifying assembly process.

Regarding claim 2, Park shows all limitations of the claimed invention except showing a structure wherein the boss is formed of resin mold and said annular rising portion being integrally inserted into said boss so as to be fixed thereto when said boss is molded.

However, Suzuki et al. disclose a motor structure wherein the boss is formed of resin mold by a synthetic resin insert-mold process (Col. 2, line 60-68) for the purpose of simplifying assembly process (Col. 1, lines 60-65).

Since Park and Suzuki et al. are in the same field of endeavor, the purpose disclosed by Suzuki et al. would have been recognized in the pertinent art of Park.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Park by using a synthetic resin insert-mold process so that said annular rising portion being integrally inserted into said boss so as to be fixed thereto when said boss is molded as taught by Suzuki et al. for the purpose of simplifying assembly process.

Regarding claim 4, Park also shows a flange (Fig. 4) being protruded on the outer periphery of said boss, an annular rising portion being provided on the side of an inner periphery of said mounting plate, an annular peripheral portion provided at the top of said rising portion and having a face parallel to said mounting plate being mounted on said flange of said boss, said annular portion of said stator core being mounted on said inner peripheral portion at the top of said rising portion, and said annular portion of said stator core, said inner peripheral portion of said mounting plate and said flange of said boss being tightened by screws extending through them.

Allowable Subject Matter

7. Claims 3 and 5 are allowed.
8. Claims 12-17 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

9. The following is a statement of reasons for the indication of allowable subject matter: the record of prior art does not show an outer rotor type motor, wherein a plural of rising portions being intermittently provided on the inner peripheral portion of the mounting plate so as to form at the tops of said rising portions core supports having a face parallel to the mounting plate. Also, the record of prior art does not show an outer rotor type motor, wherein a plural of radial slots are provided on the top of the rising portion of the mounting plate and the stator core is supported by the ribs of the boss at said slots or the stator core is core is supported by the ribs of the boss between adjacent rising portions.

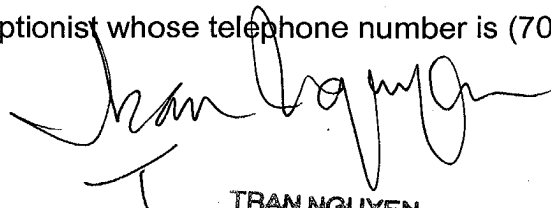
Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (703) 305-3466. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

HNN


TRAN NGUYEN
PRIMARY EXAMINER